REMARKS

Claims 1-17 and 19-26 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

CLAIM OBJECTIONS

Claim 18 stands objected to in that it is dependent on non-elected claim 13. Claim 18 is cancelled.

REJECTION UNDER 35 U.S.C. § 112

Claims 1-12 and 18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

I. The phrase "*kind of*" is deleted from claims 1 and 3. Claim 18 is cancelled.

II. The term "it" is deleted from claims 1, 2, 3, 4, and 5.

III. The term "the" is deleted from claims 1, 2, 3 and 4.

IV. The term "its" is deleted and replaced with "a" in claims 7 and 8.

V. Claim 9 is amended to clarify the phrase "by quenching the alloy of a molten state".

VI. Claim 10 is amended to clarify the phrase "by using a cooling roll".

VII. The term "is" is changed to "has been" in claims 9, 10 and 11.

VIII. Claim 18 is cancelled.

REJECTION UNDER 35 U.S.C. § 102/103

Claims 1 to 12 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Panchanathan (U.S. Patent No. 5,725,792) or Schultz et al. This rejection is respectfully traversed.

Regarding Panchanathan, Applicant respectfully submits that the taught amount of boron is outside of the claimed range. Column 3, example 2, alloy N is 1.07% B. The claimed range is 4.6 – 6.9% B.

Regarding Schultz, there is no description that directly refers to the density ρ of the bonded magnet, but as stated in line 7 of page 200, the amount of the epoxy resin contained in the bonded magnet is 1.5wt%. This means that in Schultz the amount of the magnetic powder is 98.5wt%. This amount of magnetic powder in Schultz is higher than that of the present invention. Please see Example 1 of this application, where the amount of the magnetic powder is 97wt% (first paragraph of page 30 of the English text).

In general, when two bonded magnets are manufactured using magnetic powders having the same magnetic properties, a bonded magnet containing a large amount of the magnetic powder naturally exhibits higher magnetic properties. However, between the bonded magnet of the present invention and the bonded magnet of Schultz, this relationship is reversed (that is, the amount of the magnetic powder of the present invention is less than that of Schultz, while the magnetic properties of the

present invention are higher than those of Schultz). This means that the magnetic powder of the present invention is better than that of Schultz. It is respectfully submitted that this result is because Schultz does not satisfy the relationship represented by the formula called for in claims 1 and 3.

In addition, it is respectfully submitted that, apart from the above discussion, the Schultz reference is silent with respect to the density ρ of the bonded magnet. As such, the formula recited in claims 1 and 3 cannot be satisfied. The claimed invention is therefore patentable over Schultz.

DOUBLE PATENTING

Claims 1 to 12 and 18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 10 and 14 of copending Application No. 09/754,463. Applicant submits a terminal disclaimer herewith regarding Application No. 09/754,463.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: July 24, 2002

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ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and strikethroughs indicate deletions.

1. (Amended) Magnetic powder composed on an alloy composition represented by $R_x(Fe_{1-y}Co_y)_{100-x-z-w}B_zNb_w$ (where R is at least one ~~kind of~~ rare-earth element, x is 7.1 – 9.9at%, y is 0-0.30, z is 4.6 – 6.9at%, and w is 0.2 – 3.5at%), the magnetic powder being constituted from a composite structure having a soft magnetic phase and a hard magnetic phase, wherein the magnetic powder has magnetic properties in which, when the magnetic powder is formed into an isotropic bonded magnet having a density ρ [Mg/m^3] by mixing with a binding resin and then molding ~~it,~~ the maximum magnetic energy product $(BH)_{max}$[kJ/m^3] of the bonded magnet at ~~the~~ room temperature satisfies the relationship represented by the formula $(BH)_{max}/\rho^2$[$x10^{-9} J \cdot m^3/g^2$] $\geq$ 2.2, and the intrinsic coercive force (H_{CJ}) of the bonded magnet at ~~the~~ room temperature is in the range of 320 – 720 kA/m.

2. (Amended) The magnetic powder as claimed in claim 1, wherein when the magnetic powder is formed into an isotropic bonded magnet having a density ρ [Mg/m^3] by mixing with a binding resin and then molding ~~it,~~ the remanent magnetic flux density Br[T] at ~~the~~ room temperature satisfies the relationship represented by the formula of Br/ρ [$x10^{-6} T \cdot m^3/g$] $\geq$ 0.125.

3. (Amended) Magnetic powder composed of an alloy composition represented by $R_x(Fe_{1-y}Co_y)_{100-x-z-w}B_zNb_w$ (where R is at least one ~~kind of~~ rare-earth element, x is 7.1 – 9.9at%, y is 0 – 0.30, z is 4.6 – 6.9at%, and w is 0.2 – 3.5at%), the magnetic powder being constituted from a composite structure having a soft magnetic phase and a hard magnetic phase, wherein the magnetic powder has magnetic properties in which, when the magnetic powder is formed into an isotropic bonded magnet having a density ρ [Mg/m^3] by mixing with a binding resin and them molding ~~it,~~ the remanent magnetic flux density Br[T] at ~~the~~ room temperature satisfies the relationship represented by the formula of Br/ρ [$x10^{-6}T{\cdot}m^3/g$] ≥ 0.125.

4. (Amended) The magnetic powder as claimed in claim 3, wherein when the magnetic powder is formed into an isotropic bonded magnet by mixing with a binding resin and then molding ~~it~~, the intrinsic coercive force (H_{CJ}) of the magnet at ~~the~~ room temperature is in the range of 320 – 720 kA/m.

5. (Amended) The magnetic powder as claimed in claim 1, wherein when the magnetic powder is formed into an isotropic bonded magnet by mixing with a binding resin and then molding the absolute value of the irreversible flux loss (initial flux loss) is equal to or less than 6.2%.

7. (Amended) The magnetic powder as claimed in claim 1, wherein said R includes Pr and ~~it's~~ a ratio <u>of Pr</u> with respect to the total mass of said R is 5 – 75%.

8. (Amended) The magnetic powder as claimed in claim 1, wherein said R includes Dy and ~~it's~~ a ratio of Dy with respect to the total mass of said R is equal to or less than 14%.

9. (Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder ~~is~~ has been obtained by quenching the alloy ~~of~~ in a molten state.

10. (Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder ~~is~~ has been obtained by milling a melt spun ribbon of the alloy ~~which is manufactured by using~~ with a cooling roll.

11. (Amended) The magnetic powder as claimed in claim 1, wherein the magnetic powder ~~is~~ has been subjected to a heat treatment for at least once during the manufacturing process or after its manufacture.